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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,919	02/14/2001	Yoichi Sugiyama	1422-0467P	9671

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

DOUYON, LORNA M

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/762,919	Applicant(s) SUGIYAMA ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to ~~communication(s) filed on RCE filed 3/31/04 & Amdt filed 5/5/04.~~
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 31, 2004 has been entered.

Abstract

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the instant case, the abstract should be limited to a single paragraph and it suggested that "The present invention relates to" in line 1 be deleted.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partee et al. (US Patent No. 5,726,142), hereinafter "Partee".

Partee teaches a laundry detergent which comprises an agglomerated admixture of a base granular formulation and a detergent agglomerate (see abstract; col. 1, lines 34-38), wherein the base granular formulation is spray dried in a conventional fashion (see col. 1, lines 50-53), which comprises alkali metal carbonate, an anionic surfactant in an amount up to about 40 wt%, an inert diluent such as an alkali metal chloride and a copolymer like sodium polyacrylate in an amount up to about 5 wt% (see col. 2, lines 21-43; Table under col. 3). The detergents comprise low to moderate density, preferably less than about 900 g/l, more preferably in the range of about 400 g/l (see col. 3, lines 5-10). Partee, however, fails to specifically disclose the amount of surfactant in the spray dried granules in an amount of from 0 to 3% by weight.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the surfactant of Partee through routine experimentation

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for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

6. Claims 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Partee as applied to the above claims, and further in view of Wilms.

Partee teaches the features as described above. Partee, however, fails to disclose detergent particles wherein 1 to 100 parts by weight of a surfactant is supported in 100 parts by weight of the base granular composition.

Wilms teaches a similar spray dried composition wherein the spray dried granules are impregnated with nonionic surfactants (see col. 5, lines 51-57) in an amount from about 10 to about 35% by weight, based on the final treated product (see claim 9), to improve the solubility properties of the spray dried granules (see col. 6, lines 67-68).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to impregnate the spray dried granular composition of Partee with a nonionic surfactant because such impregnation would improve the solubility properties of the spray dried granules as taught by Wilms.

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7. Claims 1, 4, 5, 6, 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (US Patent No. 3,764,559), hereinafter "Mizuno".

Mizuno teaches a dishwashing detergent composition, Component IV, comprising 35.0 wt% maleic anhydride copolymer, 18.0 wt% soda ash, 30.0 wt% sodium silicate, 15.0 wt% sodium chloride and 2.0 wt% nonionic surfactant (see Table 1 under cols 3-4), the weight ratio of the copolymer to sodium chloride is 35/15 or 2.3. Mizuno also teaches that the detergent composition can be compounded as dry powders by mixing the various components in dry form (see col. 4, lines 41-43). Mizuno, however, fails to disclose a spray-drying process for preparing the detergent composition.

It should be noted the presently rejected claims are product-by-process claims, hence, any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show the same process of making, see *In re Brown*, 173 USPQ 685 and *In re Fessmann*, 180 USPQ 324.

Response to Applicants' Arguments

8. Applicants' arguments filed on March 31, 2004 have been fully considered but they are not persuasive.

With respect to Partee, Applicants argue that in Partee, sodium chloride is used as an inert diluent, even if the amount thereof is not described, nonetheless, it can be assumed that a considerable amount is used as in Formulation 1 and 2: 40.61% and 43.18 wt% respectively.

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Applicants also argue that the amount of sodium polyacrylate is only “up to about 5 wt%”, so that the ratio from 0.3 to 100 recited in claim 1 is never suggested by the above mentioned general description of Partee. In addition, Applicants argue that the anionic surfactant in Partee is being up to about 40 wt% , preferably at about 8 to about 35 wt%, which ranges fall far outside the instant claims.

The Examiner respectfully disagrees with the above arguments because the ratio of water-soluble polymer/alkali metal halide from 0.1 to 100 is still required in independent claim 7, and therefore the broad teachings of Partee would still meet this requirement, considering the amount of polyacrylate of “up to about 5 wt%” and the sodium chloride being 40.61 wt% as in Formulation 1. With respect to independent claim 1 which requires a weight ratio of water-soluble polymer/inhibitor of 0.3 to 100, even assuming that the weight ratio of sodium polyacrylate/sodium chloride, and the content of surfactant in the Examples at columns 3 and 5 are outside the claimed range, a reference is not limited to working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982). In col. 2, lines 37-42, the copolymer is present in an amount of up to about 5 wt%, and in col. 2, lines 21-29, the surfactant is present in an amount of up to about 40 wt%. Although it is preferred that the anionic surfactant is about 8 to about 35 wt%, all disclosures of the prior art, including non-preferred embodiment, must be considered. See *In re Lamberti and Konort*, 192 USPQ 278 (CCPA 1967); *In re Snow* 176 USPQ 328 (CCPA 9173). Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the sodium polyacrylate, sodium chloride and surfactant of Partee through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the

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optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Conclusion


9. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The references are considered cumulative to or less material than those discussed above.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon
Primary Examiner
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